

14 and

15 (b) a dynamic content composition engine for interpreting the application rules dynamically
16 and generating and delivering content pages over the network to users of the application,
17 the engine including:

- 18 (i) a first manager for interpreting the application rules to select page content objects
19 to be delivered to users of the application; and
20 (ii) a second manager for interpreting the application rules to select intra-page content
21 objects, wherein the content pages delivered to users are generated in part by
22 including the selected intra-page content objects within the selected page content
23 objects.

Sub B 1 4. (New) The system of claim 2 wherein the first manager for interpreting the application
B 2 rules to select page content objects to be delivered to users of the application performs the
3 following steps in selecting the page content objects to be delivered to a particular user:

- 4 (a) obtains profile, platform, or behavioral data specific to the user;
5 (b) obtains global, aggregate data regarding profiles and behavior of other users;
6 (c) determines a potential sequence of interconnected content pages to be delivered to the
7 user;
8 Sub A 2 (d) calculates variables based upon the data specific to the user in order to determine the next
9 content page or content pages and links to subsequent content pages to be delivered to the
10 user; and
11 (e) recalculates the variables in order to determine the next content page or content pages and
12 links to subsequent content pages to be delivered to the user, whenever the user requests
13 another content page.

1 5. (New) The system of claim 2 wherein the intra-page content objects selected by the
2 second manager for interpreting the application rules comprise objects that may be invoked from
3 server-side or client-side applications and that dynamically render content pages based on
4 profile, platform, behavioral data, or interactive responses of a user.

1 6. (New) The system of claim 5 wherein the content objects adaptively render HTML
2 within the content pages.

1 7. (New) The method of claim 3, wherein the next content page to be viewed by a user is
2 pre-fetched and delivered to the user's web browser while the user views the current content
3 page, with such pre-fetching based on the user's profile, platform, or behavioral data.

1 8. (New) A system for adaptively rendering, to users of a network application, a plurality of
2 content pages generated from among a plurality of content objects, the system comprising:

3 (a) a database of information relating to the application and its users, and including the
4 following types of information:

- 5 (i) user profile data;
6 (ii) user platform data;
7 (iii) observed user behavioral data;
8 (iv) aggregate or cumulative profile, platform, and behavioral data from multiple
9 users; and
10 (v) application state data;

11 (b) a database of content objects, the content objects comprising:

- 12 (i) one or more dynamic pages;
13 (ii) one or more dynamic stacks within each page;
14 (iii) one or more dynamic content elements within each stack; and
15 (iv) one or more primitive objects within each content element;

16 (c) one or more application rules for directing the system to select dynamically:

- 17 (i) one or more of the plurality of content objects, referenced implicitly in the rules
18 via an expression that relates to one or more goals of the author;
19 (ii) one or more users of the application that may receive the selected content objects;
20 and
21 (iii) one or more application state conditions under which the selected content will be
22 delivered to the selected users;

23 and

24 (d) an engine for interpreting the application rules dynamically and generating and
25 delivering content pages over the network to users of the application.

1 9. (New) A system for adaptively rendering, to users of a network application, a plurality of
2 content pages generated dynamically from among a plurality of content objects created by an
3 author of the application, the system comprising:

(a) a database of information relating to the application and its users, and including the following types of information:

(i) user profile data;

(ii) user platform data;

(iii) observed user behavioral data;

(iv) aggregate or cumulative profile, platform, and behavioral data from multiple users; and

(v) application state data;

(b) one or more application rules for directing the system to select dynamically:

(i) one or more of the plurality of content objects, referenced implicitly in the rules via an expression that relates to one or more goals of the author, the plurality of content objects comprising:

(1) one or more dynamic pages;

(2) one or more dynamic stacks within each page;

(3) one or more dynamic content elements within each stack; and

(4) one or more primitive objects within each content element;

(ii) one or more users of the application that may receive the selected content objects;

and

(iii) one or more application state conditions under which the selected content will be delivered to the selected users;

and

(c) an engine for interpreting the application rules dynamically and generating and delivering content pages over the network to users of the application.

- 1 10. (New) A system for adaptively rendering, to users of a network application, a plurality of
2 content pages generated dynamically from among a plurality of content objects created by an
3 author of the application, the system comprising:
4 (a) one or more databases for storing information relating to the application and its users, the
5 information including:
6 (i) individual user profile data, cumulative or aggregate user profile data, user
7 platform data, and observed user behavioral data;
8 (ii) content objects created by the author of the application at a plurality of levels of
9 abstraction, the plurality of content objects comprising:
10 (1) one or more dynamic pages;
11 (2) one or more dynamic stacks within each page;
12 (3) one or more dynamic content elements within each stack; and
13 (4) one or more primitive objects within each content element;
14 (iii) application state data; and
15 (iv) application rules directing the system to select one or more of the intra-page
16 content objects for delivery to one or more users of the application if one or more
17 conditions relating to the application state data are satisfied;
18 and
19 (b) a dynamic content composition engine for interpreting the application rules dynamically
20 and generating and delivering content pages over the network to users of the application,
21 the engine including:
22 (i) a first manager for interpreting the application rules to select the dynamic page
23 content objects to be delivered to users of the application; and
24 (ii) a second manager for interpreting the application rules to select intra-page content
25 objects, wherein the content pages delivered to users are generated in part by
26 including the selected intra-page content objects within the selected dynamic page
27 content objects.
- 1 11. (New) A system for adaptively rendering, to users of a network application, a plurality of
2 content pages generated dynamically from among a plurality of content objects created by an
3 author of the application, the system comprising:

- 4 (a) a database of information relating to the application and its users, and including the
5 following types of information:
6 (i) user profile data;
7 (ii) user platform data;
8 (iii) observed user behavioral data;
9 (iv) aggregate or cumulative profile, platform, and behavioral data from multiple
10 users; and
11 (v) application state data;
12 (b) one or more application rules for directing the system to select dynamically:
13 (i) one or more of the plurality of content objects, referenced implicitly in the rules
14 via an expression that relates to one or more goals of the author, the plurality of
15 content objects comprising objects that may be invoked from server-side or client-
16 side applications and that dynamically render content pages based on profile,
17 platform, and behavioral data, and application state data of a user;
18 (ii) one or more users of the application that may receive the selected content objects;
19 and
20 (iii) one or more application state conditions under which the selected content will be
21 delivered to the selected users;
22 and
23 (c) an engine for interpreting the application rules dynamically and generating and delivering
24 content pages over the network to users of the application.
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